

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-8 (Canceled).

Claim 9 (Currently Amended): An apparatus for producing microdroplets,
comprising:

(a) [[an]] a cross intersection portion at which a first continuous phase supplied from a continuous phase supply channel, a first dispersion phase supplied from a first dispersion phase supply channel, and a second dispersion phase supplied from a second dispersion phase supply channel intersect with each other;

(b) a first liquid feed device controlling the first dispersion phase;

(c) a second liquid feed device controlling the second dispersion phase; and

(d) a control device connected to the first liquid feed device and the second liquid feed device,

wherein (e) the first liquid feed device and the second liquid feed device are controlled by a signal from the control device so that microdroplets formed of the first dispersion phase and microdroplets formed of the second dispersion phase are sequentially produced.

Claim 10 (Canceled).

Claim 11 (Canceled).

Claim 12 (Currently Amended): The apparatus for producing microdroplets, according to Claim [[10]] 9, wherein by the signal from the control device, microdroplets having uniform sizes and different components are alternately produced at a regular period.

Claim 13 (Canceled).

Claim 14 (Previously Presented): The apparatus for producing microdroplets, according to Claim 12, wherein by the signal from the control device, the period is changeable.

Claims 15-18 (Canceled).

Claim 19 (Currently Amended): An apparatus for producing microdroplets, comprising:

(a) a microdroplet producing portion producing primary ~~droplets~~ microdroplets and superfine satellite ~~droplets~~ microdroplets produced together with the primary ~~droplets~~ microdroplets;

(b) a microdroplet supply channel supplying microdroplets formed of the primary microdroplets and superfine satellite microdroplets from the microdroplet producing portion;

(c) an expansion portion connected to the microdroplet supply channel; and

(d) a branching portion having a superfine satellite ~~droplet~~ microdroplet recovery channel to recover the superfine satellite ~~droplets~~ microdroplets and a primary ~~droplet~~ microdroplet recovery channel connected to a front end of the expansion portion to recover the primary ~~droplets~~ microdroplets.

Claim 20 (Currently Amended): An apparatus for producing microdroplets, comprising:

(a) a microdroplet producing portion producing first and second primary ~~droplets~~ microdroplets and first superfine satellite ~~droplets~~ microdroplets produced together with the first primary ~~droplets~~ microdroplets and second superfine satellite droplets produced together with the second primary ~~droplets~~ microdroplets;

(b) a microdroplet supply channel supplying the first and second primary microdroplets and the first and second superfine satellite microdroplets from the microdroplet producing portion;

(c) an expansion portion connected to the microdroplet supply channel; and

(d) a branching portion having a primary droplet recovery channel connected to a front end of the expansion portion to recover the first and the second primary ~~droplets~~ microdroplets, a first superfine satellite droplet recovery channel to recover the first superfine satellite droplets, and a second superfine satellite droplet recovery channel to recover the second superfine satellite droplets.